

University of Wisconsin - Madison

Technological Solutions in Transportation:  
**Using Technology to Reduce SOV Travel**

# UW-Madison TDM Program Background



TDM Program started in 1993

## Why?

- By 1993, 63% of employees reported that they drove alone to campus.
- Surface parking lots lost to other campus needs. New parking ramps are very costly.
- Environmental concerns
- Traffic congestion
- Community leadership

# Flex Parking Program

- A “pay-as-you-use” parking program.
- Tests the theory that “pay-as-you-use” parking in conjunction with alternative transportation options reduces parking demand and SOV trips.
- Made possible by an EPA grant through the Office of Transportation and Air Quality -- Clean Air Transportation Communities: Innovative Projects to Improve Air Quality and Reduce Greenhouse Gases



# In-Car Meters and Smart Cards

- In-Car Meters and Smart Cards were purchased to administer the pay-as-you-use parking program
- The system consists of two components: a personal portable parking meter and a prepaid smart card.
- Parking information such as parking fees, maximum time allowed for parking, actual time parked and zones or lot, are stored in the card's memory.
- When the reusable card is reloaded the information can be retrieved and used for statistical analysis.



# Outcomes

| <i><b>Flex Parking Days by Sample Population</b></i> |                                  |  |
|------------------------------------------------------|----------------------------------|--|
| 2000-01 Refund Program                               | 2001-02 “Pay-as-you-use” Program |  |
| 18,072                                               | 12,824                           |  |

## ***Air Pollution Reduction:***

Hydrocarbons (HC): 1460 lbs/year

Carbon Monoxide (CO):10,950 lbs/year

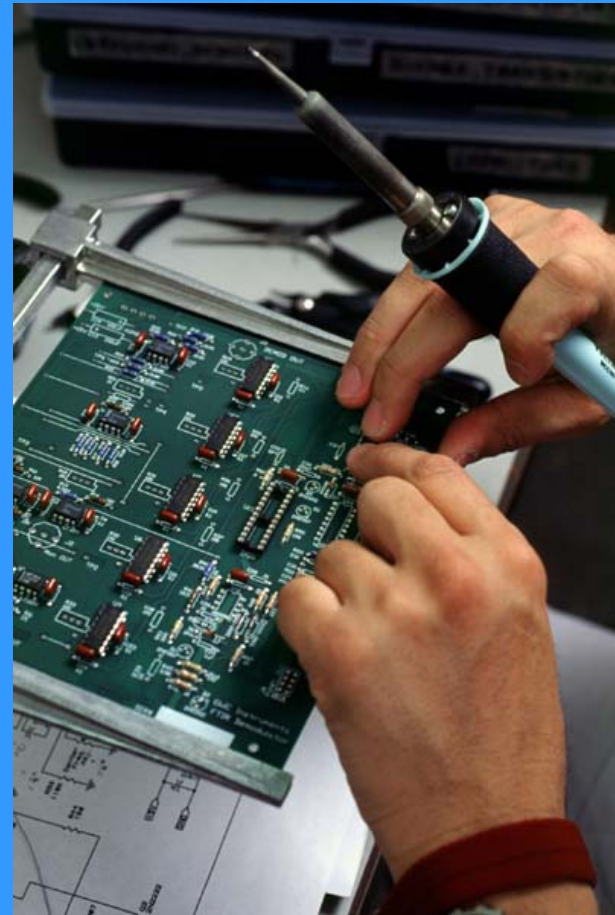
Nitrogen Oxides (NOx): 1460 lbs/year

Carbon Dioxide (CO<sub>2</sub>):402,339.5 lbs/year



# Future

- Currently have approximately 1100 employees using the In-Car Meters and Smart Cards.
- Radio Frequency Identification (RFID) technology.



# Contacts

Renee Callaway, TDM Program Manager  
University of Wisconsin-Transportation Services  
610 Walnut St, Room 124  
Madison, WI 53726  
[rcallaway@fpm.wisc.edu](mailto:rcallaway@fpm.wisc.edu)  
[www.fpm.wisc.edu/trans](http://www.fpm.wisc.edu/trans)

Ganis Smart Park Systems  
<http://www.ganis-smartpark.com/>

